#### CITY OF WARWICK

### SPECIFICATIONS FOR NEPTUNE COLD WATER METERS & ASSOCIATED EQUIPMENT/ACCESSORIES

#### **PROPOSAL**

The bidder hereby proposes to furnish the material listed in the proposal for the unit prices indicated.

The Supplier shall furnish Neptune Cold-Water Meters-Displacement/Turbine Types with Encoder Type Remote Registration Systems in accordance with all applicable provisions of the American Water Works Standards and all subsequent revisions thereof, which are hereby made a part hereof with exceptions, modifications and additions to various sections of the standard. The standard shall set forth the minimum requirements acceptable to the purchaser. It is the stated policy of the City of Warwick to continue to utilize the existing meter reading equipment and software. However, the successful bidder must be able to provide an updated version of equipment should the existing equipment become unserviceable or obsolete. The City of Warwick reserves the right to convert to radio technology compatible with existing central billing and software requirements. Please be advised the City of Warwick will not entertain or accept alternate proposals for meters and meter reading equipment. Also, the successful bidder must be an authorized distributor of Neptune products and services.

The purpose of this bid is to establish firm pricing in anticipation of future material requirements, TO BE PURCHASED ON AN AS NEEDED BASIS.

The bidder agrees that material shall be delivered to the Warwick Water Division stock room, 935 Sandy Lane, Warwick, Rhode Island, as soon as possible, after award of contract. Partial shipment will be acceptable to expedite receipt, at least 24 hour advance notice shall be provided prior to making any deliveries. All freight and transportation cost shall be the responsibility of the Supplier.

The bidder further agrees that, should he be awarded the contract, the unit prices offered in this proposal shall remain valid for a period of at least two (2) years. Additional material may be ordered during that period using standard purchasing procedures at the unit price shown in the bid. The two (2) year period shall start on the date of award of the contract. Meters rejected shall be returned to the supplier at his cost. The Supplier agrees that meters shall be delivered within thirty (30) calendar days upon receipt of order.

The bidder may bid on any one or more groups of the bid proposal. It must bid on all items in a particular group. If any item is not bid, the group where this item appears shall not be further considered for award. If you do not wish to bid on any group, write "NO" BID in the total group space.

#### **SPECIAL CONDITIONS**

#### GUARANTEE

A certificate of testing for accuracy and capacity will be required. The meters furnished shall be new, of the latest model which have been catalogued for one (1) year or more, and fabricated in a first-class workmanlike manner from good quality material.

The Contractor shall replace and install free of charge to the Purchaser any part that fails in any manner by reason of defective material or workmanship, with a period of <u>five</u> (5) years from the date accepted by the Purchaser. Registers and gear reduction units shall be guaranteed against defects in workmanship and material for a period of ten (10) years from the date of installation.

#### ACCEPTANCE

Each vendor must deliver to the Water Division, 935 Sandy Lane, Warwick, Rhode Island, a sample meter for testing and inspection by Meter Division personnel. The Water Division further reserves the right to inspect meters for quality and workmanship before or after delivery prior to accepting shipment. Bidder shall state any warranty which he offers on the entire meter or part thereof, as part of his bid. Each warranty and price list together with design features and parts availability shall be considered along with bid price in the determination of the best bid.

#### DELIVERY

Delivery shall be made to the Water Division, 935 Sandy Lane, Warwick, Rhode Island. All shipping costs shall be paid by the supplier. The supplier shall pay all freight charges for defective material shipped to its factory under warranty.

#### **DISPLACEMENT TYPE**

#### **GROUP ONE**

The cold-water meters – displacement type to be furnished under these specifications shall be in accordance with all applicable provisions of the American Water Works Standard AWWA C700-90, C707-82, and all subsequent revisions thereof, which are hereby made a part hereof with exception, modification and addition to various sections of the Standard. These Standards shall set forth the minimum requirement acceptable to the Water Division, hereinafter referred to as the Purchaser.

<u>Item</u>	Quant.	Unit	Size	Description	Unit <u>Price</u>
1.1	1	ea. ——	5/8"	Cold Water Meter with encoder - and remote register 1 cubic feet	\$
1.2	1	ea. ——	3/4"	Meters-Cold Water with encoder - and remote register 1 cubic feet.	\$
1.3	1	ea. ——	1"	Meters-Cold Water with encoder - and remote register 10 cubic feet.	\$
1.4	1	ea. 	1 1/2"	Meters-Cold Water with encoder - and remote register 10 cubic feet.	\$

<u>Item</u>	Quant.	Unit	Size	Description	<b>Unit Price</b>
1.5	1	ea. ——	2"	Meters-Cold Water with encoder type and remote register 10 cubic feet.	\$

NOTE: ALL DISPLACEMENT TYPE METERS ARE TO BE SCREW END.

#### **TURBINE TYPE**

#### **GROUP TWO**

The cold-water meters – Turbine – type to be furnished under these specifications shall be in accordance with all applicable provisions of the American Water Works Standard AWWA C701-88 and all subsequent revisions thereof, which are hereby made a part hereof with exceptions, modification and addition to requirement acceptable to the Water Division, hereinafter referred to as the purchaser.

The Strainers for - Turbine - Type Meter to be furnished under these specification and particularly well suited for Turbine Meters and compatible with all makes of meters.

Strainers, Bodies and Covers in 2 through 6 inch sizes are cast bronze. 8" bodies and covers cast iron. Strainer elements and bolts in all sizes are stainless steel. Working pressure rated at 150 psi strainer designed and built to minimize head loss and inline serviceability.

Item	Quan	. Unit	Size	Description	Unit <u>Price</u>
2.1	1	ea. ——	2"	Meters-Cold Water, direct reading register with low flow indicator, units of measure in cubic feet, registration 10 Cu.Ft. per sweep hand revolution, Without companion flanges	\$
2.2	1	ea. ——	2"	Strainers, cast bronze body, ductile iron, low head loss stainless steel strainer plate & cover bolts, pressure tested to 300 psi, in-line serviceability.	\$
<u>2.3</u>	<u>1</u>	<u>ea.</u>	<u>3"</u>		\$
2.4	<u>1</u>	<u>ea.</u>	<u>4"</u>		\$

#### **COMPOUND TYPE**

#### **GROUP THREE**

The cold-water meters – compound – type to be furnished under these specifications shall be in accordance with all applicable provisions of the American Water Works Standard AWWA C702-92 and all subsequent revisions thereof, which are hereby made a part hereof with exceptions, modification and addition to requirement acceptable to the Water Division, hereinafter referred to as the purchaser.

Item	Quan.	Unit	Size	Description	Unit <u>Price</u>
3.1	1	ea. ——	2"	Meters-Cold Water, two registers, units of measure in cubic feet	\$
3.2	1	ea.	3"	Meters-Cold Water, two registers, units of measure in cubic feet	\$
3.3	1	ea. 	<b>4</b> "	Meters-Cold Water, two registers, units of measure in cubic feet	\$
3.4	1	ea.	6"	Meters-Cold Water, two registers, units of measure in cubic feet	\$

			COMP	OUND TYPE (Cont'd)	
			9	GROUP THREE	
					Unit
<u>Item</u>	Quan.	Unit	Size	Description	<u>Price</u>
3.5	1	ea. ——	8" x 6"	Meters-Cold Water, two registers, units of measure in cubic feet	\$

			<u> </u>	FIRE SERVICE TYPE	
				GROUP FOUR	
Item	Quan.	Unit	Size	Description	Unit Price
4.1	1	ea. ——	3"	Meters-Cold Water, two registers, units of measure in cubic feet	\$
4.2	1	ea.	4"	Meters-Cold Water, two registers, units of measure in cubic feet	\$
4.3	1	ea.	6"	Meters-Cold Water, two registers, units of measure in cubic feet	\$
4.4	1	ea.	8"	Meters-Cold Water, two registers, units of measure in cubic feet	\$

4.5	1	ea. 10"	Meters-Cold Water,	
			two registers, units of measure in cubic feet	\$

		COMMUNICATION DEVICES		
		GROUP FIVE		
Item	Quan.	Description	Unit <u>Price</u>	
5.1	1	Neptune Advantage Probe for reading ARB/ProRead and R900 MIUs.	\$ ·	
5.2	1	Neptune R900 Radio Frequency \$ MIU Pit Mount W/6' of wire.		
5.3	1	Neptune R900 Radio Frequency MIU Wall mount.	\$	
5.4	1	ea. Neptune 4 wheel integrated E-Coder Meter Heads (10 C		
	1	ea. 5/8"	\$	
	1	ea. 3/4"	\$	
	1	ea. 1"	\$	
	1	ea. 11/2"	\$	
	1	ea. 2"	\$	

	1		ea. 3"	\$
	1		ea. 4"	\$
	1		ea. 6"	\$
	1		ea. 8"	\$
5.5	1	ea.	Trimble Nomad 900B Neptune Handheld I Collector, Bluetooth Only with 1 stylus, 1 p Adaptor, 2 antiglare screen protectors, 1 h Strap, and 1 SD card	ower
5.6	1	ea.	Neptune Charging and Communications Cra For Trimble Nomad	adle \$
5.7	1	ea.	Neptune R900 Belt Clip Transceiver includ Cables, batteries and accessories	ing \$
5.7	1	ea.		
			Cables, batteries and accessories	\$
	1	ea.	Cables, batteries and accessories  3/4"	\$ \$
	1	ea.	Cables, batteries and accessories  3/4"  1"	\$ \$ \$
	1 1 1	ea. ea.	Cables, batteries and accessories  3/4"  1"  11/2"	\$ \$ \$
	1 1 1	ea. ea. ea.	Cables, batteries and accessories  3/4"  1"  11/2"  2"	\$ \$ \$ \$
	1 1 1 1	ea. ea. ea. ea.	Cables, batteries and accessories  3/4"  1"  11/2"  2"  3"	\$ \$ \$ \$ \$

# PIT RECEPTICLES, REGISTER HEADS, TP'S, WIRE GROUP SIX

Item	Quan.	Unit	Description	Unit <u>Price</u>
6.1	1	ea.	Register Heads- T10, 2 Board, 2 Wire Cubic Ft, 6 Digit, 4 Digit Read H 65 N #R62F11 5/8"	\$
6.2	1	ea.	Register Heads – T10, 2 Board, Cubic Ft., 6 Digit, 4 Digit Read, H 65 N, #R62F21 3/4"	\$
6.3	1	ea.	Register Heads- T10, 2 Board, 2 Wire Cubic Ft., 6 Digit, 4 Digit Read, H 65 N, #R62F31 1"	\$
6.4	1	ea.	Register Heads – T10, 2 Board, 2 Wire Cubic Ft., 6 Digit, 4 Digit Read, H 65 N, #R62F41 11/2"	\$
6.5	1	ea.	Register Heads – T10, Cubic Ft, 6 Digit, H 65 N	\$
6.6	1	ea.	Meter Wire, 3 Strand 22 Gauge 1,000 rolls	

#### **METER PITS**

<b>O</b> D	$\sim$ 1	1	CE	\/E	Ň
GR	OU	JΡ	SE	VEI	N

- 1. Meter Pits Less Cover W/Compression Outlet
  - a. W/Angle Ball Valves P.J. x CTS Ref. Ford #3A94 – 323 W
  - b. W/Angle Cartridge Style Dual Check Valve Ref. Ford #HHCA91-323

Meter Pits	<u>Sizes</u> :	<u>Unit Price</u> :
	5/8"	ea.
	3/4"	ea.
	1"	ea.
	1 ½"	ea.
	2"	ea.

2. Meter Pit Cover – Includes:

Frame

**Frost Cover** 

Cover w/Locking Electric Meter Reading Lid

Ref. Ford #W3T / 11 1/2" x 20"

3. Meter Pit Poly Risers

20" x 3"

\_\_\_\_ ea.

20" x 6"

ea.

#### **BRASS FOR METERS**

1.	Downsizing Adapter	3/4" x 1/2" x (5/8"	)	ea.	
2.	Street Elbow	1/2" Male x Female	e 90°	ea.	
3.	Close Nipple	1/2" x Close		ea.	
4.	Nipple	1/2" x 1 1/2"		ea.	
5.	5. Brass Ball Valve 3/4" IPS w/Drain			ea.	
6.	Brass Ball Valve 1/2"	ea.			
7.	Brass Coupling – 2 pie	ea.			
8.	8. Brass Adapter 3/4" FLx M1P 90° Ref.# H-15530				
MEASURING CHAMBERS- T10					
	<u>Met</u>				
	5/8'		ea.		
	3/4'	•	ea.		
	1"		ea.		
	1 ½	n	ea.		
	2"		ea.		
	Ref.# 5/8" x T-10 Measuring Chambers				

#### HIGH PERFORMANCE TURBINE REPLACEMENT

\_\_\_\_\_ ea.

- liner and gasket 5/8" through 2" ea.

- frost plate 5/8" through 1"

- strainer 5/8" through 1"

## TRU/FLOW COMPOUND METERS UNITIZED MEASURING ELEMENT (UME)